December 23, 2009

MEMORANDUM TO: Michael A. Norato, Acting Chief
Mixed Oxide and Uranium
Deconversion Branch
Division of Fuel Cycle Safety
and Safeguards
Office of Nuclear Material Safety
and Safeguards

FROM: David H. Tiktinsky, Senior Project Manager **/RA/**
Mixed Oxide and Uranium
Deconversion Branch
Division of Fuel Cycle Safety
and Safeguards
Office of Nuclear Material Safety
and Safeguards

SUBJECT: SUMMARY OF THE CLOSED MEETING WITH SHAW AREVA MOX SERVICES TO DISCUSS A REVISED EVALUATION OF THE APPROACH FOR THE POSTULATED ELECTROLYSER TITANIUM FIRE EVENT

On November 12, 2009, the U.S. Nuclear Regulatory Commission staff met with representatives from Shaw AREVA MOX Services to discuss their revised evaluation of the approach for the postulated electrolyser fire event for the Mixed Oxide Fuel Fabrication Facility to be built in Aiken, SC.

Please see the enclosed meeting summary for more details (Enclosure 1). The meeting attendance list is also enclosed (Enclosure 2). The meeting handout can be found in Enclosure 3 (OUO-SRI and Proprietary). The meeting summary does not contain any official use only material.

Enclosures: As stated

1) Meeting summary
2) Meeting attendees
3) Meeting handout (OUO-SRI and proprietary)

cc w/enclosures 1 and 2 only:

S. Glenn, NNSA/SRS
J. Olencz, NNSA
S. Jenkins, SC Dept. of HEC
D. Silverman, Esq., MOX Services
D. Gwyn, MOX Services
A.J. Eggenberger, DNFSB
L. Zeller, BREDL
G. Carroll, Nuclear Watch South
D. Curran, Esq., Nuclear Watch South

CONTACT: David Tiktinsky, NMSS/FCSS
(301) 492-3229

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OFC	FCSS/MODB	FCSS/MODB
NAME	DTiktinsky	MNorato
DATE	12/23/2009	12/23/2009

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SUMMARY OF THE CLOSED MEETING WITH SHAW AREVA MOX SERVICES TO DISCUSS A REVISED EVALUATION OF THE APPROACH FOR THE POSTULATED ELECTROLYSER TITANIUM FIRE EVENT FOR THE MIXED OXIDE FUEL FABRICATION FACILITY TO BE BUILD IN AIKEN, SC

DATE November 12, 2009

PLACE Rockville, MD

ATTENDEES See Enclosure 2

PURPOSE

The purpose of the closed meeting was for Shaw AREVA MOX Services (the applicant) personnel to present and discuss with the U.S. Nuclear Regulatory Commission staff their proposed revised approach for the postulated electrolyser titanium fire event.

DISCUSSION

In its License Application and ISA Summary for the MOX Fuel Fabrication Facility (MFFF), Shaw AREVA MOX Services (MOX Services) presented its analysis of the safety program for preventing a titanium fire from occurring in the Aqueous Polishing System electrolyzers due to a short circuit or arcing of the electrical system and components.

In previous descriptions of the IROFS and other controls proposed by the license applicant, a number of questions have been raised by the NRC staff regarding which controls are being relied on for safety to prevent this fire event from occurring, and whether the proposed set of IROFS and safety program approach will be effective in reducing the risk of occurrence or the consequence of this event. One of the proposed IROFS controls previously identified by the applicant—the sintered silicon nitride barrier—was originally credited with serving a partial role in the prevention of this event (this was identified as a principal structure, system, or component (PSSC) in the Construction Authorization Request). However, on closer examination by the applicant, they have concluded that the sintered silicon nitride barrier is not necessary to demonstrate that the event is highly unlikely.. This meeting was held to allow the AREVA/MOX Services team an opportunity to explain its revised approach for demonstrating that through the use of the remaining proposed identified IROFS controls, the electrolyzer titanium fire event can be rendered highly unlikely.

MOX Services plans on submitting its revised evaluation of the electrolyser titanium fire event (and associated IROFS) for technical evaluation by the NRC Staff.

No regulatory decisions were made at the meeting.

The meeting was then adjourned.

November 12, 2009, Electrolyser Titanium Fire Event Discussion Meeting Attendees

David Tiktinsky	NRC
Kevin Morrissey	NRC
Michael Norato	NRC
Rex Wescott	NRC
David Rahn	NRC
Dealis Gwyn	MOX Services
Bill Hennessey	MOX Services
Scott Salzman	MOX Services
Phillippe Rondet	MOX Services
Francois Delcroix	MOX Services